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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,229	10/07/2005	Wolfgang Dinkelacker	K0004/7006	6706

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EXAMINER	
SINGH, SUNIL K	

ART UNIT	PAPER NUMBER
3732	

MAIL DATE	DELIVERY MODE
09/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,229	DINKELACKER, WOLFGANG	
	Examiner	Art Unit	
	Sunil K. Singh	3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-8 and 12-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *10 and 11* is/are allowed.

6)☒ Claim(s) *2-8 and 12-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to applicant's amendments filed on 06/16/2008.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lustig et al (US 6,287,115) in view of Choung (US 6,332,778).

Lustig et al. discloses an implant having: an implant body having a longitudinal axis; an implant top portion having a through-borehole (825 and 915), a first end that mate with the implant body at an interface (See Fig. Below) and at a second opposing end, a cylindrical recess (See Fig. Below) arranged coaxially with the through-borehole, the bottom of the cylindrical recess; a connecting screw (see Fig. Below) that passes through the through-borehole and engages a threaded borehole (see Fig. below); a borehole that surrounds a through-borehole (825 and 915) for connection screw and a recess (see Fig. Below) with a supporting area designed as a truncated cone (Shown in Figure below)(Fig. 1-17) for the screw head; a screw head having an underside that has a conical recess having a widest part facing toward the implant body when the connecting screw is in place (Fig. 44, 46); an implant top that is adapted to the profile of the implant body by means of a screw (Column 2, Lines 58-67). It is inherent that the female taper and the truncated cone are brought into close contact when the connection

screw is tightened. Lustig et al. further discloses an implant where the interface between the implant body and the implant top portion has a head that runs at a right angle to the longitudinal axis of the implant body (Figs. 15 and 43c); an interface between the implant body and the implant top that has a profile adapted to a comb shape of the jaw (Fig. 43c); a profile that is inclined toward the buccal side and the lingual side (Fig. 43c); and where the profile toward the buccal side and the lingual side is circularly rounded and also has a bell shape (Figs. 1-17, 43b and 43c). Lustig further discloses a jaw implant where the inclined faces of the buccal side and on the lingual side in the interface area of the implant body form an angle, which is larger than the angle between corresponding inclined surfaces on the buccal side and the lingual side in the interface area of the implant top portion; and where the rounded surface on the buccal side and the lingual side have a smaller radii of curvature in the interface area of the implant top portion than the corresponding rounded surfaces on the buccal side and on the lingual side in the interface area of the implant body (Figs. 15-17, 43b and 43c). However, Lustig fails to disclose an implant system wherein the bottom of the cylindrical recess being formed of as a raised truncated cone.

Choung teaches an implant system that includes an implant wherein the bottom of the cylindrical recess has a raised truncated cone shape (16') that mates with the underside of the screw head (30) that has a conical recess (36') wherein the widest part is facing toward the implant (Fig. 7e). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lustig, to include

the screw configuration, as taught by Choung, in order to provide an implant system wherein the screw is lockingly fitted with the implant.

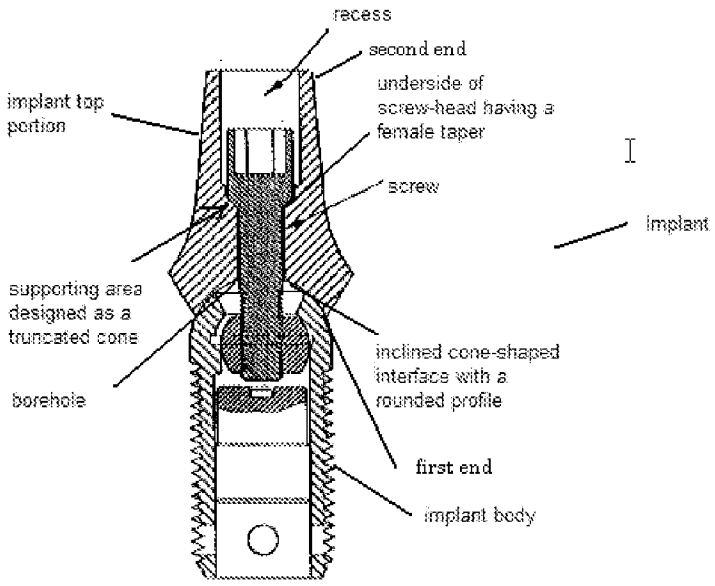

FIG. 15

3. Claims 7,8 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lustig et al. (US 6,287,115) in view of Choung (US 6,332,778) and further in view of Kirsh (US 4,793,808).

Lustig/Choung discloses the invention substantially as claimed except for an implant top that is elastically deformable under pressure of a screw when tightened.

Kirsh teaches an implant where the implant top portion having an interface area that is elastically deformed under the action of a screw and where the elastic deformation exerts a restoring force in order ensure that the fitted connection is not loosened (Column 2, Lines 3-10 and Column 6, Lines 4-5). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made

to modify Lustig/Choung by having an interface area of the implant top portion that is elastically deformable under pressure of a screw, as taught by Kirsh, in order to ensure that the fitted connection cannot be loosened.

4. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lustig et al. (US 6,287,115) in view of Choung (US 6,332,778); Kirsh (US 4,793,808) and in further view of Balfour et al. (US 2003/0068599).

Lustig/Choung/Kirsh discloses the invention substantially as claimed except for an implant where the bell shaped profile in the interface area has a circular concave part having a smaller radii of curvature than the corresponding circular convex part.

Balfour et al. teaches a dental implant having a bell shaped interface area (16) with a circular concave part having smaller radii of curvature than the corresponding circular convex part (Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lustig/Choung/Kirsh by having an interface area in the bell shape, as taught by Balfour et al., in order to provide an alternate means of attaching the implant bottom portion to the implant top portion.

Allowable Subject Matter

5. Claims 10 and 11 allowed.

Response to Arguments

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil K. Singh whose telephone number is (571) 272-3460. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris L. Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

09/04/2008

/Sunil K Singh/
Examiner
Art Unit 3732

/Ralph A. Lewis/
Primary Examiner, Art Unit 3732